

Highlights

State-of-the-Art Reactor Consequence Analyses

With Commission- Three Votes

- RES is recommending a re-focusing of the project by working on 8 plants, initially, that may constitute usable surrogates for the current operating fleet.
- Elements of an alternate approach include:
 - Perform a complete analysis on an initial set of 6-8 plants. These plants should be representative of different reactor-designs and containment-types in use in this country.
 - Report to the Commission:
 - Results
 - Costs associated with analysis and associated experiments.
- The Chairman and Commissioners Lyons and Merrifield voted "no" on proceeding with the current communication plan. These Commissioners support reducing the scope to no more than 8 plants and using improved risk communications to present the results of the study. SECY has requested that the remaining Commissioners vote by Feb 15, 2007.
- NRC is performing SOAR-CA to replace the outdated, conservative SNL siting study, which overestimates both the magnitude and consequences of postulated accidents in NPP. 25 years of research and plant improvements guide the new study.
- Will produce a realistic evaluation of severe accident progression, radiological releases and off-site consequences. It is anticipated to be a faster-than-real-time tool to assist in decision-making in the event of off normal events.
- Code improvements are underway.
- SOAR-CA results for each NPP site will be publicly available at the end of the study.

DISCUSSION:

Staff has indicated that some Policy decisions may be required, for example: (1) LNT (linear-no-threshold); (2) Treatment of dose and dose effects; and (3) EP (sheltering vs. evacuation)

Aircraft Vulnerability for New Reactors

With Commission Two Votes

- A Staff Requirements Memorandum (SRM 060911A) required staff to provide an information paper on plans to assess aircraft impacts on new reactor designs.
- Information paper changed to Notation Vote paper by Commissioner Lyons, to address the staff's resource limitations (use of knowledgeable staff) that would impact the SOARCA project.
- The upshot of this is that we will likely not be able to provide much in terms of insight by the Mar 07, unless the vote is completed very quickly.
- We have the Comm Plan on hold for now, too. We will also not be approaching vendors to get the info needed until we get some clear direction.
- Informs the regulatory guidance associated with proposed rulemaking (73.55 & 73.62).
- Will inform Commission immediately if any vulnerabilities are identified.
- Step 1 will address 4 new Light Water Reactors (AP1000, ABWR, ESBWR, and EPR)
- Identifies potential scenarios with time-frames (Step 2) comparable to those in EP basis.